USACE Briefing for Mozambique Delegation

9 October 2001

The U.S. Army Corps Of Enginee

A U.S. Public Engineering Agency that:

- **Develops and manages water resources.**
- **Designs and constructs military facilities for the Army and Air Force.**
- **Performs reimbursable**

Organization

★★★
HQUSACE

Transatlantic Programs Center
U.S. Army Engineering & Support Center, Huntsville

★★ & ★
Divisions (8)

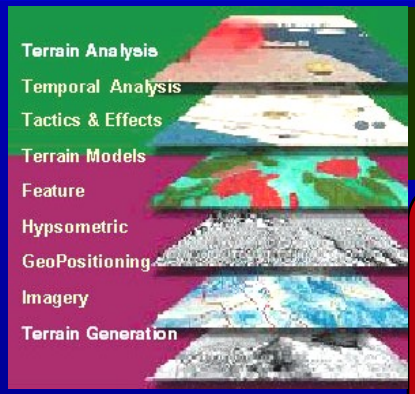
Engineer Research and Development Center

&
Districts (41)

Huntsville Center, USACE expertise in ordnance/explosive waste and chemical demilitarization.

Waterways Experiment Station, Hydraulic Mo

USACE Army Missions

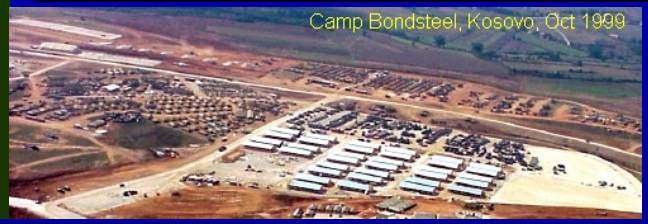


Research & Development

- Combat engineering
- Civil construction
- Terrain & Geospatial

Military

- Military construction
- Base operations
- Environmental restoratio
- Geospatial Engineering



Real Estate

- Acquire, manage & dispose
- DOD recruiting facilities
- Contingency

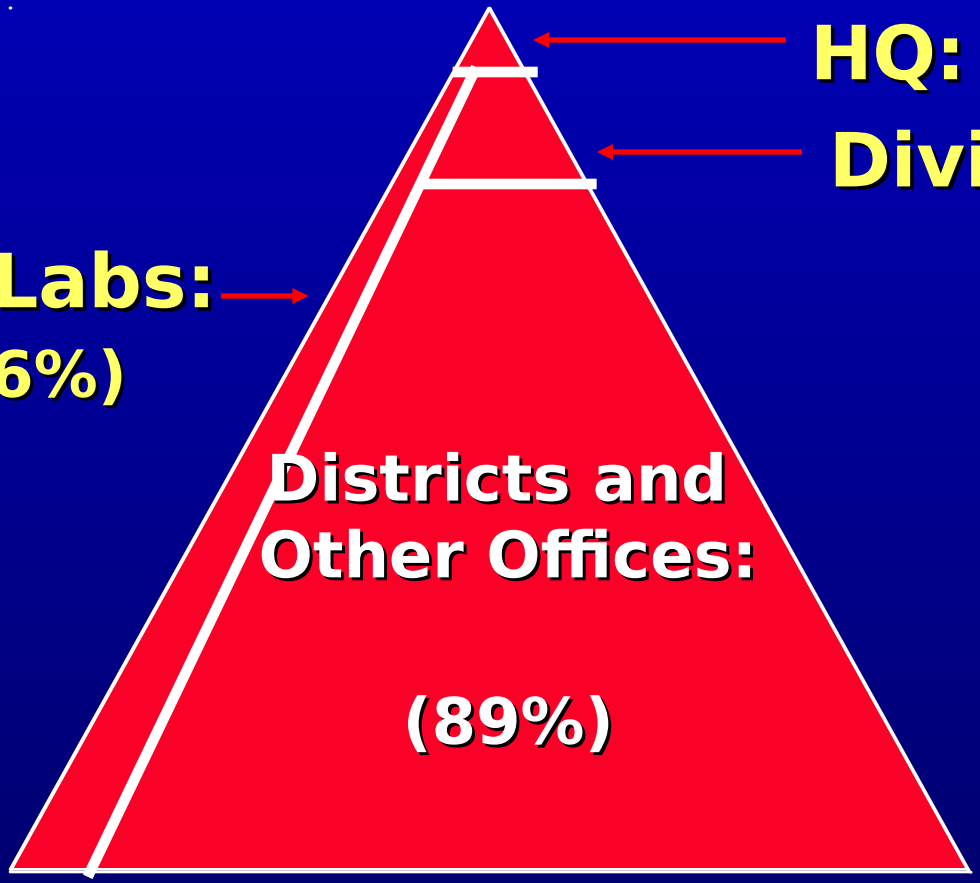
Interagency Support

- DOD & Federal
- State & Local
- International

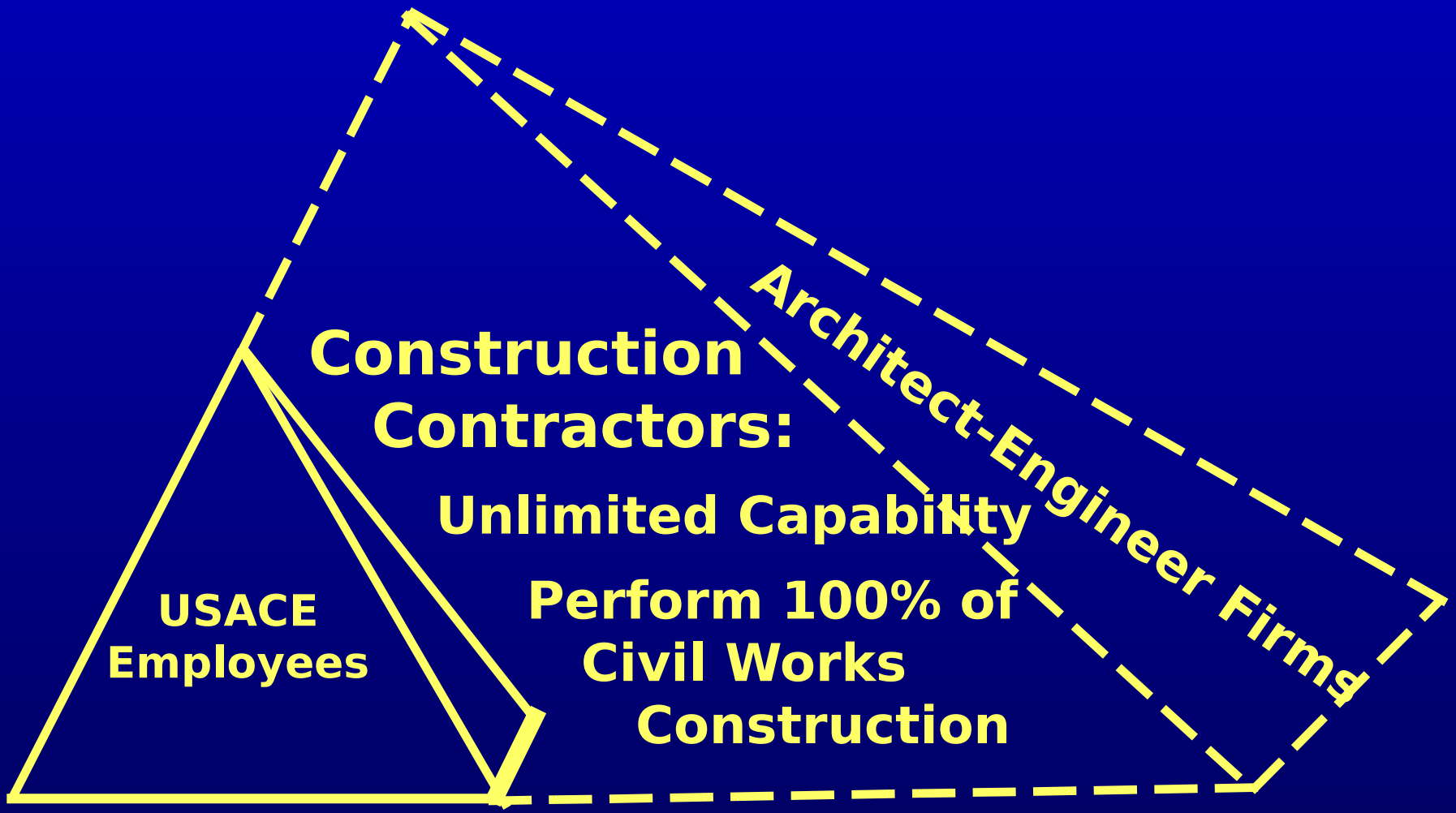
Civil Works

- Navigation
- Flood control
- Disaster response
- Environmental restoration

Distribution of Workforce



Private Sector Leverage



Civil Works Overview

The Army Civil Works Mission

Provide the Nation with Responsive ...

Development & Management o
Water Resources Infrastructure

Protection, Restoration &
Management of the Environme

Disaster Response & Recovery

Engineering & Technical Servic

in an environmentally, economically and technically sound ma

Civil Works Divisions and Districts

Business Programs

- Navigation (Harbors, Inland Waterways)
- Flood Control and Shore Protection
- Environmental Stewardship
- Regulation of U.S. Waters and Wetlands
- Formerly Used Sites Remedial Action Progra
  (FUSRAP - Radiological Waste Cleanup)
- Disaster Preparedness and Response
- Hydropower
- Water Supply and Quality
- Recreation
- Support to Other Agencies

Business Program:

- ✓ **11,000 miles of Inland and Intracoastal Waterways**
  - **237 Lock Chambers**
  - **Moving over 600 million tons**
  - **Carrying 16% of Nation's inter-city freight at a cost 1/2 that of rail, 1/10 that of trucks**
- ✓ **300 major seaports handle 1.5 billion tons of cargo per year**
  - **Over 600 smaller harbors**

Business Program:

- ✓ 383 dams & reservoirs
- ✓ 8,500 miles of levees
- ✓ Flood protection advice & assistance to States, Localities, Tribes
  - 35,000 requests for information per year
- ✓ Average annual flood damages prevented = $22 B
- ✓ Every $1 invested in flood control has prevented nearly $6 in flood damages (after adjusting for inflation)

Business Program:

- ✓ Manage 18,000 sq. mi. of project lands (1/2 DA total, 1/3 DOD total)
- ✓ All projects regularly checked for compliance with environmental law
- ✓ Project modifications for Improvement of Environment (Sec. 1135)
- ✓ Major environmental restoration projects (e.g. Everglades)
- ✓ Approx. 15% of Civil Works Budget is for environmental stewardship

Business Program:

- ✓ Sec. 404, Clean Water Act of 1972; other laws; court decisions
- ✓ Nearly 90,000 permit cases processed per year
  - 92% completed within 60 days
- ✓ Actions permitted on 21,000 acres; in return, 46,600 acres of wetland restoration or creation required
- ✓ 1,100 people employed in program

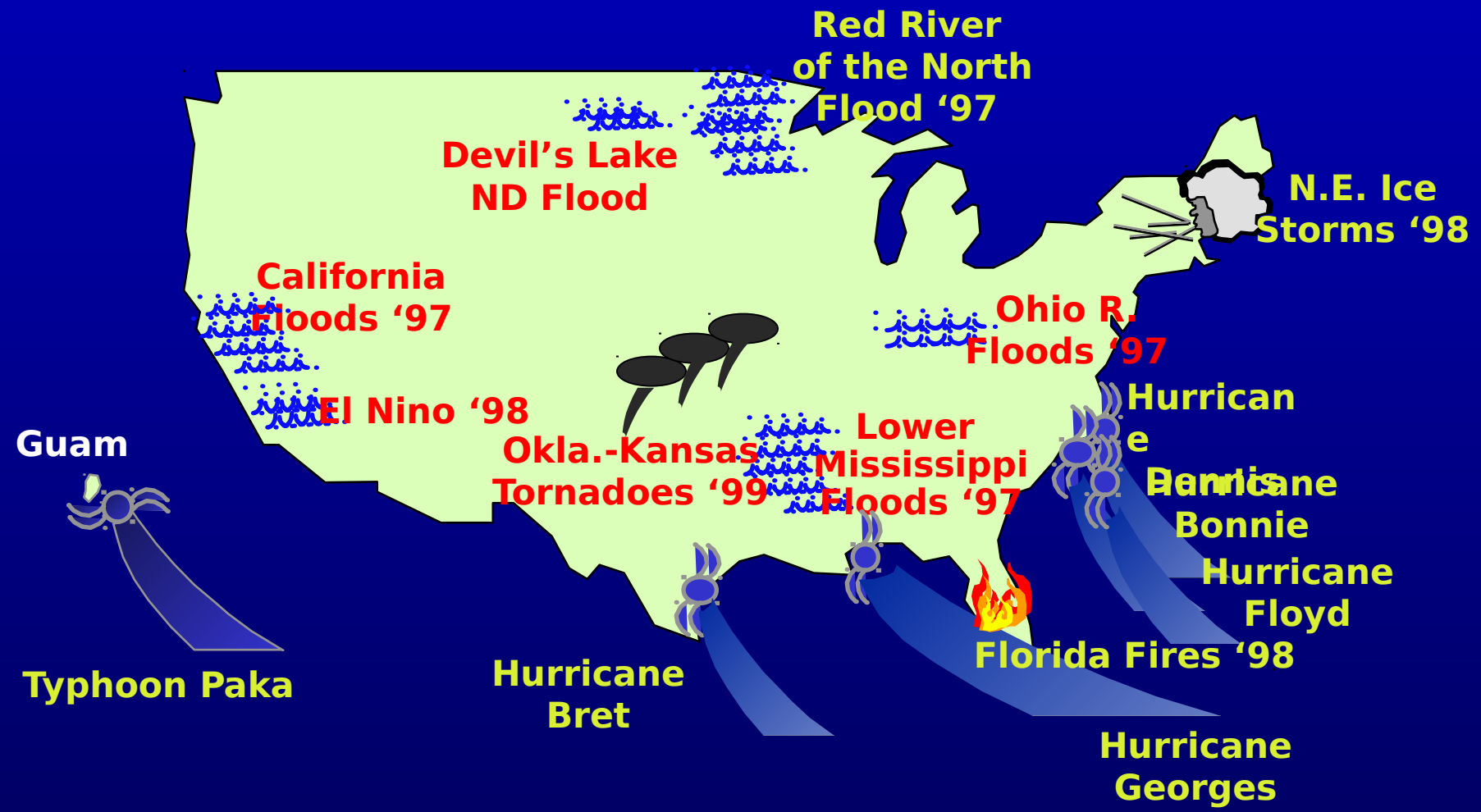
Business Program:

- Cleanup of sites contaminated with low level radioactive waste
  - Sites in Missouri, Ohio, New York, New Jersey, Maryland, Illinois, Massachusetts & Connecticut

Business Program:

- Army has missions under law
  - P.L. 93-288 (Stafford Act--FEMA)
  - P.L. 84-99 (Floods)
- Federal Response Plan: Army is executive agent for Engineering & Public Works support
- Leverage with contractors; other Army & DOD assets

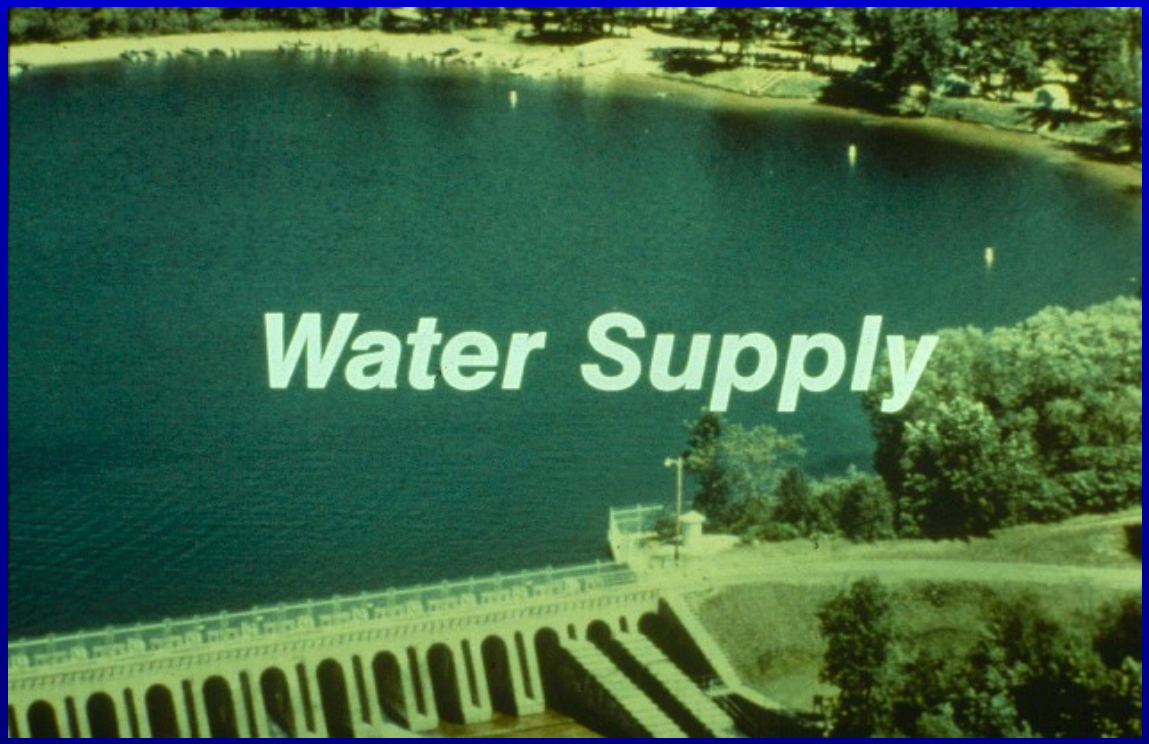
Major Disaster Responses - 1997-99



Business Program:

- ✓ 24% of Nation’s hydropower (3% of total U.S. electric energy)
- ✓ 75 plants with over 20,000 megawatts total capacity
- ✓ Nearly $450 million a year in U.S. revenue from power sales

Business Program:



- Water from Corps reservoirs supplies 10 million people in 115 cities
  - Including Washington, DC; Pentagon; Virginia suburbs from aqueduct built and operated by Corps since 1857
- Agricultural water supplied from Western projects

Business Program:

- ✓ Corps is second largest provider of outdoor recreation in U.S.
- ✓ Over 4,300 sites at 463 projects
- ✓ 360 million visits a year by about 25 million people
  - 10% of U.S. population visits at least one day a year
- ✓ 600,000 jobs generated by recreation
- ✓ Corps rangers meet more Americans than any other Department of Army personnel

Business Program:

- $800 million in construction/management for 60 U.S. agencies
- Major customers:
  - Environmental Protection Agency (Superfund toxic waste cleanup)
  - Federal Emergency Management Agency
  - Departments of Justice, Transportation, Energy, Interior
- Corps expenses reimbursed by agency requesting support
- Agencies often find it more cost-effective to use Corps than develop in-house engineering management organization

Military Programs Overview

Military Programs Mission

"To provide engineering, construction, and environmental management services for the Army, Air Force, other assigned U.S. Government agencies, and foreign governments."

Army

U.S. Government Agencies

Air Force

Foreign govt's worldwide

Military Programs
Divisions and Districts

Contingency Suppo

Research and Development Overview

U.S Army Engineer Research and Development Center (ERDC)

Cold Regions Research & Engineering Lab Hanover, NH

Topographic Engineering Center Alexandria, VA

Construction Engineering Research Lab Champaign, IL

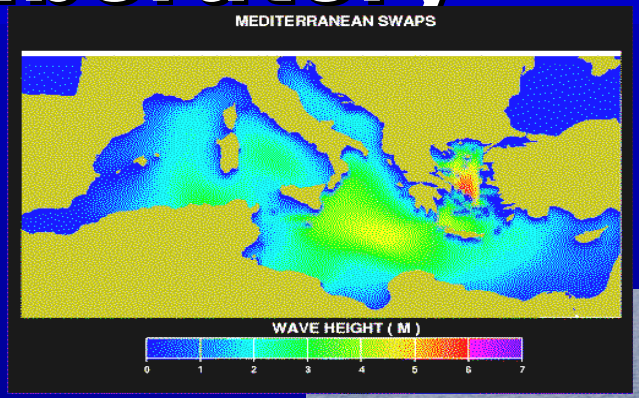
Coastal and Hydraulics Lab
Environmental Lab
Geotechnical and Structures Lab
Information Technology Lab Vicksburg, MS

Mission Areas

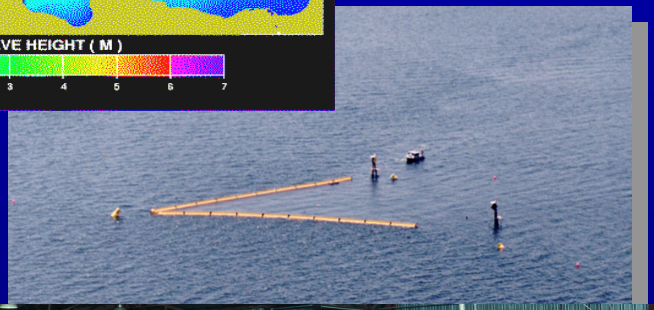
- Combat Engineering
- Topography
- Installations
- Environmental Quality
- Water Resources

Coastal and Hydraulics Laboratory

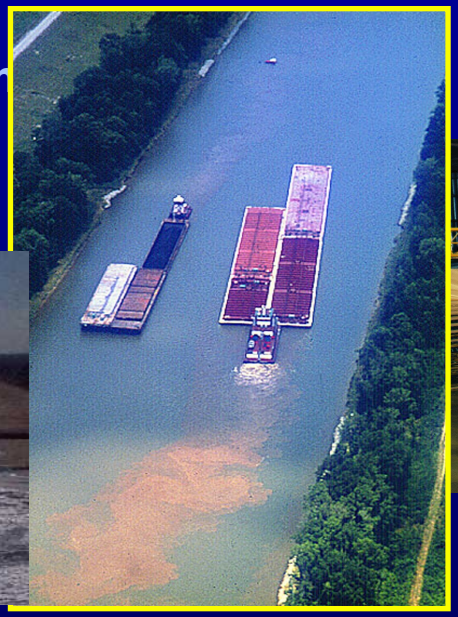
Physical Models



Numerical Models



Navigation



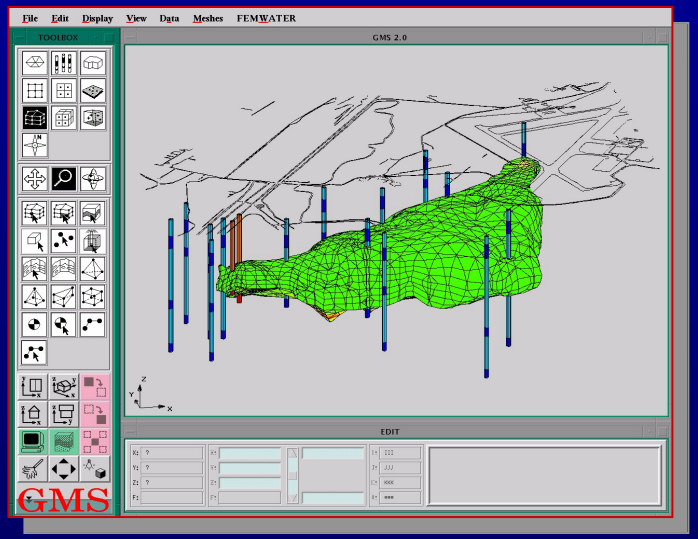
Flood Control

Sustainment Engineering

Environmental Laboratory

UXO

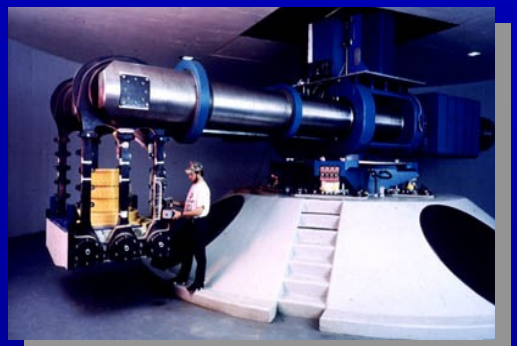
Hazardous and Toxic Waste Research



Ground Water Modeling

Environmental Chemistry

Geotechnical and Structures Laboratory



Centrifuge Research

Airfields and Paveme

Terrorist Threat Protection

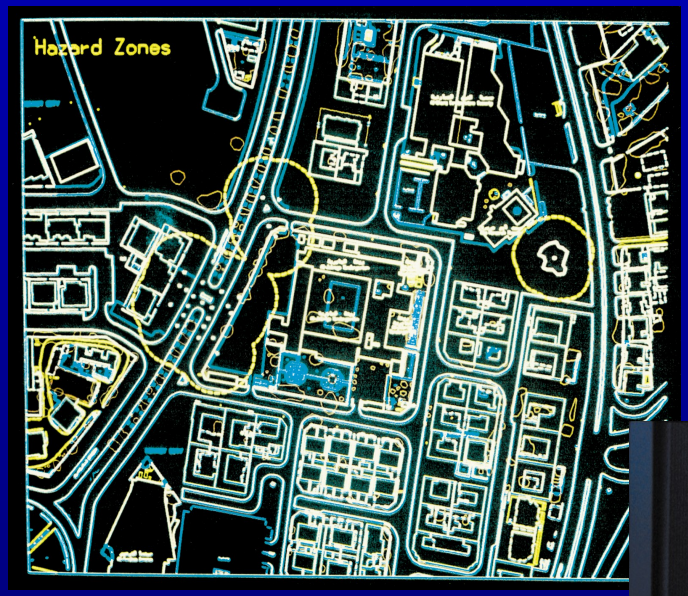
Mobility

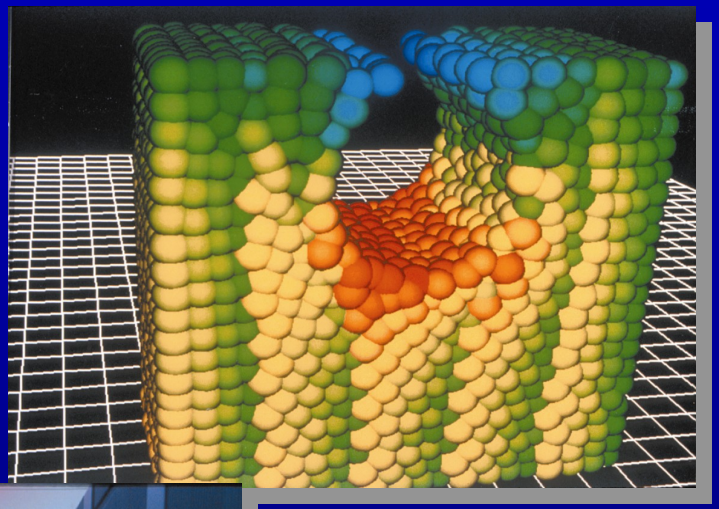
Explosives Effects

Survivability & Hard Target Defeat

Information Technology Laboratory

CADD/GIS Technology





DOD High Performance Computing Center

Cold Regions Research and Engineering Laboratory

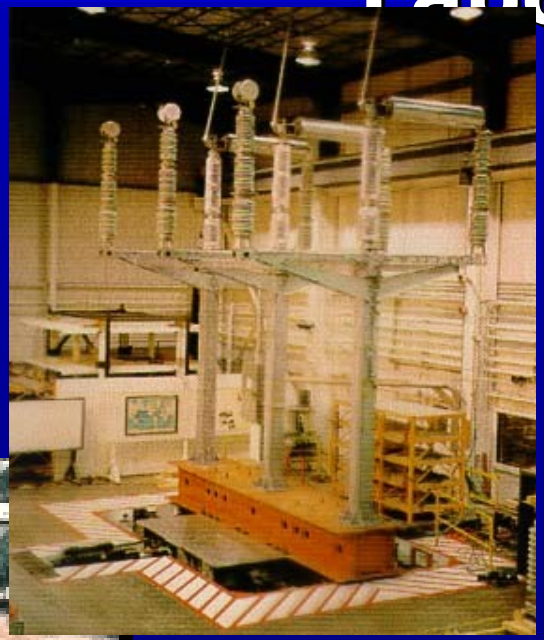
Cold Weather Design

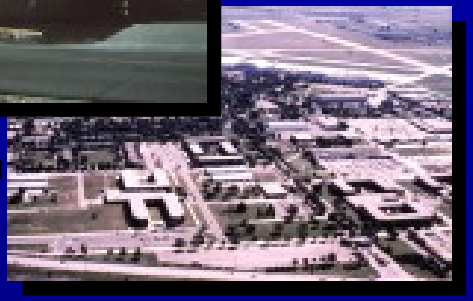
Ice Effects

Frost Effects

Military Engineering

Construction Engineering Research Laboratory



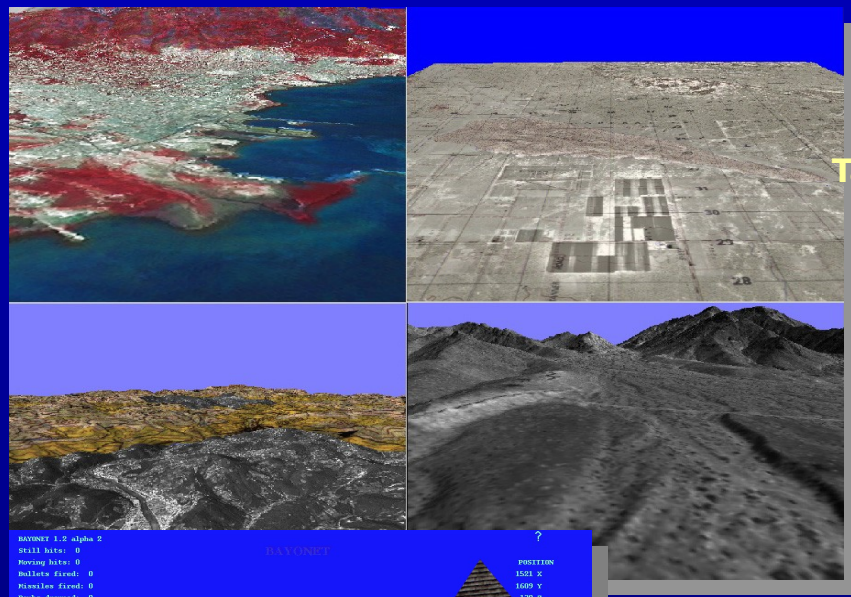


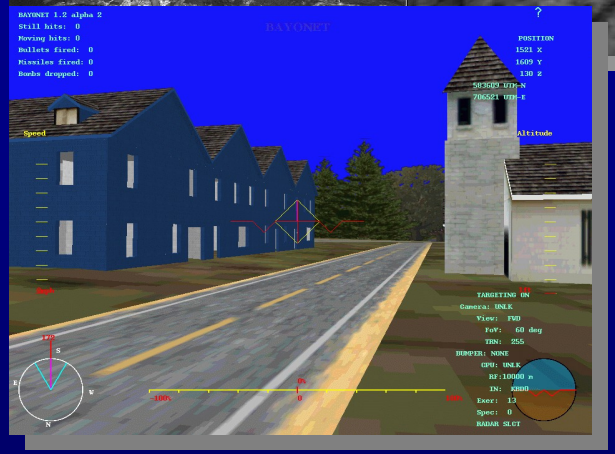
Installation Operations

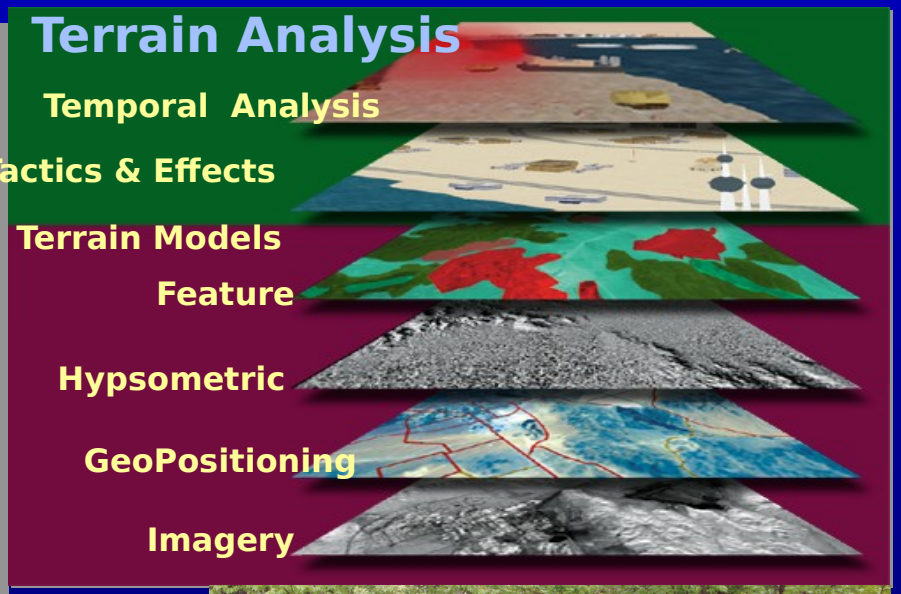
Facilities Acquisition and Revitalization

Military Land Management

Topographic Engineering Center







Terrain Generation, Reasoning & Visualization

Combat Terrain Info Systems